

Some characteristic features of unsaturated swelling porous media deformation

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Abstract

© 2015 Springer Science+Business Media New York. The behavior of unsaturated swelling porous media under load is investigated. An equation for unsaturated filtration in swelling porous media and an equation relating the volume deformation of the medium to the magnitude of applied load have been obtained. The results of calculations by these equations are compared with corresponding experimental data.

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Keywords

Soil-ground, Swelling porous medium, Unsaturated filtration